

Murphy



The Comptroller General  
of the United States

Washington, D.C. 20548

## Decision

Matter of: Janke & Company, Incorporated  
File: B-225710, B-226897  
Date: June 12, 1987

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### DIGEST

Protest that low temperature and noise level test requirements for aircraft hydraulic system test stands are impossible to meet and unduly restrictive is sustained where the record supports the protester's contention that the requirements have never been met, and the agency does not establish that they are necessary to meet its minimum needs.

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### DECISION

Janke and Company, Incorporated protests as unduly restrictive the testing requirements included in a military specification for diesel-powered test stands under request for proposals (RFP) Nos. F41608-87-R-C033 and F41608-87-R-C013, issued by the San Antonio Air Logistics Center, Kelly Air Force Base, Texas. Janke contends that two requirements are impossible to meet.

We sustain the protests.

### BACKGROUND

The solicitations, issued on January 30 and April 14, 1987, respectively, sought offers for trailer mounted, diesel engine-powered test stands for aircraft hydraulic systems. The military specification for the test stands requires a number of preproduction environmental tests, including a low temperature test and a noise level test. Similar tests have been included in the hydraulic test stand specifications since at least September 23, 1964, when the predecessor to the current specification (MIL-S-0026877C (USAF) (99), 27 January 1982) was promulgated.

The low temperature test requires the diesel engine to be stored at minus 65 degrees fahrenheit for 24 hours; the temperature to be raised to minus 40 degrees; the test stand to start after 30 minutes or less of preheating; and the flow and pressure of the two hydraulic systems in the test stand to attain certain levels ("rated output") and maintain

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those levels for 30 minutes. The noise level test specifies maximum decibels at various sound frequencies. The specification states that failure of the test stand to successfully perform these environmental tests constitutes cause for rejection.

Janke contends that none of the firms that has manufactured diesel-powered test stands for the Air Force and Navy, including itself and APS Systems, Inc., ACL-Filco, and Hydraulics International, Inc., has ever produced a test stand meeting the low temperature and noise level tests. Janke states that it has provided hydraulic test stands and ancillary equipment to the Air Force and Navy for more than 20 years, and that during this period, compliance with the tests has not been required of any manufacturer. The protester raises the issue in these procurements because the Air Force cited failures to pass the low temperature and noise level tests as two of several grounds for terminating two recent Janke test stand contracts.

The Competition in Contracting Act of 1984 requires agencies to develop specifications in such a manner as is necessary to obtain full and open competition and to include restrictive provisions only to the extent necessary to satisfy agency needs or as authorized by law. 10 U.S.C. § 2305(a)(1) (Supp. III 1985). When a protester challenges specifications as presenting such a high risk that they are unduly restrictive of competition, the burden is on the agency to establish prima facie support for its contention that the restrictions it imposes are needed to meet its minimum needs. Once the agency establishes such support, the protester must show that the requirements complained of are unreasonable. Cardion Electronics, B-218566, Aug. 15, 1985, 85-2 CPD ¶ 172.

#### LOW TEMPERATURE TEST

Janke argues that the diesel engines used to power the hydraulic test stands will not start under the conditions for the low temperature test set forth in the specifications. In support of this contention, Janke has submitted a 1984 test report on an ACL-Filco hydraulic test stand in which the engine did not start for more than 2 hours, even though the ground rules for the test were violated (a booster battery was attached and room temperature fuel was used), and the rated output was never achieved. A 1984 low temperature test report for a test stand manufactured by Hydraulics International for the Navy reflects similar deficiencies: a booster battery and battery charger were required to start the motor. First article test reports for Janke test stands in 1980 and 1986 show failures to meet the low temperature requirements. The Janke engines started

only after replacing the batteries and raising the temperature to 0 degrees, a violation of the test conditions. The protester also has submitted evidence of a prior waiver of tests for a test stand manufactured by APS Systems, Inc., and studies of low temperature battery operation conducted with respect to a turbine driven test stand. Janke argues that these reports establish the impossibility of starting the test stand diesel engines at minus 40 degrees without heating and recharging the batteries or using additional batteries or another electrical source.

The Air Force states that it recognizes that the low temperature test is "very difficult," but that its engineers believe the requirement can be met. Initially the Air Force stated that hydraulic test stands manufactured by ACL-Filco under its 1978 contract passed the low temperature tests, but that the contract records were no longer extant. As discussed above, Janke has submitted the first article test report for that contract, which it obtained through the Freedom of Information Act, showing that ACL-Filco's test stand failed the low temperature test in several respects. The Air Force apparently no longer questions the protester's assertion that the specification has never been met, and in a September 6, 1986 letter to Janke, the agency stated that "we agree with your questioning the ability of any hydraulic test stand to fully pass this [low temperature] test requirement."

The agency's sole support for its contention that the low temperature test, as included in the protested solicitation, is required to meet its minimum needs is as follows: "Based on worldwide support needs, the [minus 40 degrees] reading is necessary to meet Air Force operating requirements including bases in northern tier states and the Alaska Air Command."

The issue here is not whether the test stands must operate in minus 40 degree temperatures, but whether the low temperature test should include the use of booster batteries and other aids to start diesel engines in such an environment. For example, the report on Hydraulics International's test stand stated that a portable 1500 BTU hot air blowing heater, a fresh booster battery, and a battery charger must be used in starting the diesel engine in extreme cold. We assume that these or similar measures are used by the Air Force in very cold climates to start test stand engines.

Although Janke argues that it is impossible, using current battery technology, to design equipment that will pass the test, we do not reach this issue and do not intend by this

decision to indicate any views on the question, which we understand is currently before the Armed Services Board of Contract Appeals in connection with Janke's appeal of two contract terminations. We do recognize and the Air Force concedes that prospective contractors will have difficulty producing test stands that meet the low temperature test as now formulated. Our concern is whether the Air Force has provided a rational basis for the restriction on competition inherent in that requirement. We find that the Air Force has not done so. The agency has not established that its minimum needs cannot be met by a revision of the low temperature test to reflect experience with previously procured test stands and current methods for starting the diesel engines in extreme cold. Consequently, we sustain this basis of the protest.

#### NOISE LEVEL TEST

Janke argues that the noise level test cannot be passed using the diesel engine model (Detroit Diesel series 53N) required by the specification. The protester does not contend that it is technically impossible to meet the specified noise levels, but that the amount of noise suppression material necessary to meet requirements at low frequency levels severely hinders engine performance and creates an unacceptable hazard for operating personnel. In support, Janke has submitted first article test reports for ACL-Filco and Janke test stands showing failures to achieve required noise levels, particularly at low frequency levels, and Air Force approval for a Hydraulics International test stand to exceed required noise levels by an average of 7 decibels.

The Air Force does not contend that the noise level test has ever been met, but asserts that it readily can be. The sole support for the agency's belief that the specification is necessary to meet its minimum needs is the following statement: "The decibel levels specified are established based on Occupational Health and Safety Act (OSHA) requirements." The Air Force does not refer to any specific OSHA requirements or state how the test standards are derived from those requirements, and the relationship between the test standards and OSHA requirements that we are aware of is not readily apparent. Furthermore, OSHA restrictions on noise exposure can be met by administrative or engineering controls or the use of personal protective equipment. The Air Force has not addressed the availability of these alternative approaches or its need for a diesel engine that Janke contends is the basis for the problem in the first instance. We find that the Air Force has not met its obligation to establish prima facie support for the

challenged noise restriction, and we also sustain Janke's protest on this basis.

By letter of today to the Secretary of the Air Force, we are recommending that the low temperature and noise level test requirements included in the solicitations be revised to conform with the standards established as achievable in previous procurements of diesel engine-powered hydraulic test stands. In addition, we find the protester entitled to the costs of filing and pursuing the protest. The firm has successfully challenged an unduly restrictive specification, and, as a result of our recommendation, competition will be enhanced. 4 C.F.R. § 21.6(d)(1)(e) (1986); Southern Technologies, Inc., B-224328, Jan. 9, 1987, 87-1 CPD ¶ 42.

We sustain the protests.

*for* *Harry R. Ken Cline*  
Comptroller General  
of the United States